

IN THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the Application:

LISTING OF CLAIMS:

1. (Cancelled)

2. (Currently amended) A power source equipment of a network power system, the power source equipment comprising:

at least one physical layer including:

an inline power control signal source originating from the physical layer, wherein the inline power control signal is configured to indicate when to apply power to a port when there is no power applied to the port and when to remove power from the port when there is power applied to the port; and

signal processing of the inline power control signal, wherein the signal processing is external to the at least one physical layer.

3 - 6. (Cancelled)

7. (Currently amended) A power source equipment of a network power system, the power source equipment comprising:

at least one physical layer including:

an inline power control signal source originating from the physical layer, wherein the inline power control signal is configured to indicate when to apply power to a port when there is no power applied to the port and when to remove power from the port when there is power applied to the port; and

a signal processor configured to process the inline power control signal, wherein the signal processing is external to the at least one physical layer.

8 - 10. (Cancelled)

11. (Currently amended) A network switch for a network power system, the switch comprising:

at least one physical layer including:

an inline power control signal source originating from the physical layer, wherein the inline power control signal is configured to indicate when to apply power to a port when there is no power applied to the port and when to remove power from the port when there is power applied to the port; and

signal processing of the inline power control signal, wherein the signal processing is external to the at least one physical layer.

12 - 14. (Cancelled)

15. (Previously presented) A system comprising:

one or more inline power devices;

one or more powered devices coupled to an inline power device, each of the one or more inline power devices and each of the one or more powered devices having at least one port, each port having a physical layer, the physical layer including an inline power control signal source wherein an inline power control signal source originating from the physical layer controls application of power to the port, and further comprising:

a signal processor external to the physical layers to process the inline power control signal.

16. (New) A power source equipment according to claim 2, wherein the physical layer comprises a physical coding sublayer and a physical medium attachment sublayer and is configured to serve as a bridge between a media-dependent interface of the port and a media-independent interface of the port.

17. (New) A power source equipment according to claim 16, further comprising a media access control component and a station management component both connected to the media-independent interface.

18. (New) A power source equipment according to claim 17, wherein the station management component provides management data input/output and a management data clock to the physical layer.

19. (New) A power sourcing equipment according to claim 16, wherein the physical layer further comprises a physical medium dependent sublayer.

20. (New) A power source equipment according to claim 7, wherein the physical layer comprises a physical coding sublayer and a physical medium attachment sublayer and is configured to serve as a bridge between a media-dependent interface of the port and a media-independent interface of the port.

21. (New) A power source equipment according to claim 20, further comprising a media access control component and a station management component both connected to the media-independent interface.

22. (New) A power source equipment according to claim 21, wherein the station management component provides management data input/output and a management data clock to the physical layer.

23. (New) A power sourcing equipment according to claim 20, wherein the physical layer further comprises a physical medium dependent sublayer.

24. (New) A network switch according to claim 11, wherein the physical layer comprises a physical coding sublayer and a physical medium attachment

sublayer and is configured to serve as a bridge between a media-dependent interface of the port and a media-independent interface of the port.

25. (New) A network switch according to claim 24, further comprising a media access control component and a station management component both connected to the media-independent interface.

26. (New) A network switch according to claim 25, wherein the station management component provides management data input/output and a management data clock to the physical layer.

27. (New) A network switch according to claim 24, wherein the physical layer further comprises a physical medium dependent sublayer.

28. (New) A system according to claim 15, wherein the physical layer of each port comprises a physical coding sublayer and a physical medium attachment sublayer and is configured to serve as a bridge between a media-dependent interface of the port and a media-independent interface of the port.

29. (New) A system according to claim 28, further comprising for each port a media access control component and a station management component both connected to the media-independent interface of the port.

30. (New) A system according to claim 29, wherein the station management component provides management data input/output and a management data clock to the physical layer.

31. (New) A system according to claim 28, wherein the physical layer of each port further comprises a physical medium dependent sublayer.